

REMARKS

The Invention

This invention relates to prefabricated houses and, more specifically, to a modular, expandable prefabricated house. The disclosed invention provides a prefabricated house having two or more modules, each module having one or more foldable walls. The foldable walls have one or more multi-frame openings that may be converted to doors, windows or other openings. Thus, the individual modules are structured to be joined at the multi-frame openings in more than one configuration. For example, if each module was rectangular and included a multi-frame opening at the middle point of each wall, the modules could be joined along adjacent longitudinal walls thereby forming, generally, a square shaped layout, or, the modules could be joined with a longitudinal wall coupled to a lateral wall, thereby forming, generally, a T-shaped layout. The multi-frame openings are special constructs.

That is, multi-frame openings are built into the module frame during construction, but may be disposed under a covering over the frame, such as dry wall. The multi-frame openings 20 on separate core modules are disposed in predetermined locations so that multiple core modules may be joined together when the modules are aligned in various predetermined configurations. Thus, when core modules are joined together, any pair of multi-frame openings may have the covering removed so that a passageway is formed. Other multi-frame openings may be converted into windows or other such openings. Construction of the multi-frame opening may be traditional or steel framed or a combination or hybrid, including wood, steel, plastics, adhesives, screws, nails, chalkboard, vinyl, glass, rubber and/or not limited to other synthetics. The multi-frame openings may be disposed between any two spaced apart studs within the frame, and incorporates the studs into the multi-frame opening. The multi-frame opening also includes a plurality of cross members. Two of the cross members, at the top and bottom, may be integral with the module frame. The top and bottom cross-members along with the medial cross-members are removably coupled to the studs and may be removed as required to construct the appropriate sized openings.

Status of the Claims

Claims 1-19 are pending in the application.

Claims 1-4 and 17-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Beighton*, U.S. Patent No. 6,959,515.

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beighton* '515 in view of *Derman* (U.S. Patent No. 2,070,924).

Claims 7-13, 16 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beighton* '515 in view *Prigmore et al.* (U.S. Patent No. 4,779,514).

Claims 1-4 and 17-18; Rejected Under 35 U.S.C. § 102(e)

Claims 1-4 and 17-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Beighton*, U.S. Patent No. 6,959,515. *Beighton* discloses a building structure having a plurality of modules including at least one support module and at least one room module. The support module, as the name implies, is coupled to a foundation and structured to support the room modules. As the name implies, a “room module” is structured to accommodate various living spaces such as a “living room,” a “dining room,” or a “bedroom” (Col. 7, lines 39-41). Generally, the room modules are cantilevered units that hang from the support module. That is, the room modules are coupled at one side to the support module. The end of the room module that is opposite the support module is unsupported. Further, when support modules are stacked and room modules are disposed with one room module above another, the upper room module does not contact the lower room module. (*See*, Fig. 1).

Given this basic construction, the room modules are required to have a strong frame, or as set forth in the *Beighton* specification, a “chassis.” The chassis, which is described as “a series of unbraced frames,” (Col. 5. lines 45-46) is made from steel and, essentially, defines the outer perimeter of the room module. The chassis is structured to support a number of side walls, a floor and a roof; these are also identified as “panels.” The panels are disposed “between the structural members” (Col. 5, line 29) of the chassis.

As such, the panels are not load-bearing members. The panels may, however, have an outer sheet that is coupled to the chassis. Such panels increase the rigidity of the module.

Additionally, the *Beighton* specification merely names certain additional functions and/or elements of the chassis, but does not provide sufficient detail to be considered an enabling disclosure. For example, the *Beighton* specification mentions in several locations that the chassis may have cross-bracing; however, no such cross-bracing is shown in the figures and the location of such cross-bracing is not discussed in detail. Similarly, the panels that comprise the walls are described as having apertures “at the locations of doors and windows” (Col. 5, lines 50-51). The same panels are described as having a sheet of metal on the outer surface; however, there is no indication that the sheet has similar apertures or how such apertures would be created.

As set forth at MPEP 2121.01, “[i]n determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure'....” *In re Hoeksema*, 399 F.2d 269, 158 USPQ 596 (CCPA 1968). The disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation. *Elan Pharm., Inc. v. Mayo Found. For Med. Educ. & Research*, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003).

The specialized frames that are the *Beighton* chassis are fundamentally different from the frames and/or the multi-frame openings of the present invention. As set forth in the specification of the present application at page 9, lines 13-15, a frame of the present invention, and more specifically a “multi-frame opening” as recited in the claims, includes “studs.” A frame having studs includes a top plate, a bottom plate, and a plurality of studs (vertical members). See, Affidavit of Robert Delorenzo, (copy attached as Exhibit A) Guertin and Arnold, *Fine Homebuilding*, “Anatomy of a Stud-Framed Wall,” at <http://www.taunton.com/finehomebuilding/pages/h00023.asp>., (copy attached as Exhibit B). See also *Ask This Old House*, Stud Spacing, <http://www.thisoldhouse.com>

(copy attached as Exhibit C). As is further well known in the art, studs are typically placed either 16 inches or 24 inches apart. *See, Affidavit of Robert Delorenzo, see also, Ching, Building Construction Illustrated (3rd Ed.), 2001, page 5.03, (copy attached as Exhibit D), and, The BOCA National Building Code, 1999, (stating that, “Studs in nonloadbearing walls and partitions shall not be spaced more than 48 inches....”) (copy attached as Exhibit E).*

Moreover, the spacing of the vertical members of the *Beighton* chassis and the spacing of studs is not simply a design choice. As noted above, various building codes set forth the maximum spacing allowed between studs. This maximum spacing is typically 24 inches for loadbearing walls and 48 inches for nonloadbearing walls. Conversely, the *Beighton* chassis, which is a loadbearing frame, is sized to accommodate a “room module.” While *Beighton* does not provide a minimum dimension for a “room,” it cannot be reasonably assumed that a “room,” such as a “living room” or a “bedroom,” is smaller than 48 inches by 48 inches (the maximum spacing between studs in a nonloadbearing wall).

Applicant further notes that the present application provides a description as to how a multi-frame opening is converted into selected openings. Generally, the covering is removed to expose the multi-frame opening. Then, for example, if the opening is to be a door, the medial and bottom cross-members 24, 25, 26, 27, 28, 29 could be removed. *See generally, page 9, lines 13-30.*

Thus, the claims of the present application recite the use of a “multi-frame opening” which, by definition includes studs. Studs have a maximum spacing of 48 inches. Conversely, the *Beighton* reference is directed to a frame or chassis for a room module. Although not defined specifically, a “room,” such as a “living room” or a “bedroom” as set forth at *Beighton*, Col. 7, lines 39-41, must have vertical members that are spaced more than 48 inches apart. As such, *Beighton* does not disclose the use of a “multi-frame opening” as set forth in the claims of the present application.

As stated in MPEP §2131:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently

described, in a single prior art reference.... The identical invention must be shown in as complete detail as is contained in the ... claim.

Verdigaal Brothers v. Union Oil Company of California, 814 F.2d 628, 631 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Company*, 868 F.2d 1226, 1236, (Fed. Cir. 1989). Given the definition of “multiframe openings” as used in this application, it is respectfully submitted that upon reading the *Beighton* reference, one skilled in the art would not consider a prefabricated house having “a module frame[] having one or more multiframe openings.”

Independent Claim 1 recites a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings. As the cited art does not disclose a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings, this reference cannot be used as a reference under 35 U.S.C. § 102(e) and the rejection of Claim 1 should be withdrawn.

Claim 2, which depends from Claim 1, further recites that the multiframe openings are structured to be converted into openings. The *Beighton* reference merely states that certain panels may have apertures. Such a statement does not amount to an enabling disclosure and, as such, the *Beighton* reference fails to disclose that the multiframe openings are structured to be converted into openings. Accordingly, this reference cannot be used as a reference under 35 U.S.C. § 102(e) and the rejection of Claim 2 should be withdrawn.

Claim 3, which depends from Claim 1, recites that the multiframe openings include a pair of studs and a plurality of cross-members. As set forth in detail above, the *Beighton* frame does not include “studs.” Accordingly, this reference cannot be used as a reference under 35 U.S.C. § 102(e) and the rejection of Claim 3 should be withdrawn.

Claim 4 depends from Claim 3 and relies upon its dependency for patentability.

Claims 17 and 18 each depend from Claim 1 and rely upon their dependency for patentability.

Claims 5-6; Rejected Under 35 U.S.C. § 103(a)

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beighton* '515 in view of *Derman* (U.S. Patent No. 2,070,924). The deficiencies of *Beighton* are noted above. *Derman* discloses a wardrobe or cabinet. There are at least three problems with the use of *Derman* as prior art: (1) *Derman* is non-analogous art; (2) there is also no teaching, incentive or motivation found within these references to combine the references; and (3) the *Derman* reference fails to disclose the elements cited by the Examiner.

With regard to the first point, Applicant refers to MPEP §2141.01 which cites *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In *Oetiker*, the applicant claimed an improvement in a hose clamp which differed from the prior art in the presence of a preassembly "hook" which maintained the preassembly condition of the clamp and disengaged automatically when the clamp was tightened. The Board relied upon a reference which disclosed a hook and eye fastener for use in garments, reasoning that all hooking problems are analogous. The court held the reference was not within the field of applicant's endeavor, and was not reasonably pertinent to the particular problem with which the inventor was concerned because it had not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments.

This application relates to prefabricated houses. *Derman* discloses a wardrobe or cabinet. Just as a garment hook is not related to a hose clamp, a wardrobe is not related to a prefabricated house. That is, the Examiner has not demonstrated why one skilled in the art of building prefabricated houses would turn to a reference disclosing a wardrobe to create an improved modular home. As such, the *Derman* reference is non-analogous art.

With regard to the second point, the art cited by the Examiner fails to suggest a combination. As stated in, *In re Geiger*, 815 F.2d 686, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987), "obviousness cannot be established by combining teachings of the prior art to

produce the claimed invention, *absent some teaching, suggestion, or incentive supporting combination*” (*emphasis added*). Put another way, “the mere fact that disclosures or teachings of the prior art can be retrospectively combined for the purpose of evaluating obviousness/nonobviousness issue does not make the combination set forth in the invention obvious, *unless the art also suggested the desirability of the combination*” *Rite-Hite Corp. v Kelly Co.*, 629 F.Supp. 1042, 231 U.S.P.Q. 161, *aff’d* 819 F.2d 1120, 2 U.S.P.Q.2d 1915 (E.D. Wis. 1986) (*emphasis added*). Similarly, the court in, *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991), stated that “both the suggestion [to make the claimed apparatus] and the reasonable expectation of success must be found in the prior art, not in the Applicants’ disclosure.” Neither of the references cited by the Examiner suggests the combination relied upon by the Examiner and, as such, these references may not be combined to form the basis of a rejection under 35 U.S.C. §103(a).

Moreover, as set forth in MPEP §2143.01, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In this application, the combination suggested by the Examiner would render the *Beighton* chassis useless. That is, as set forth above, the *Beighton* chassis is structured to support an entire room in a cantilever configuration. There is no indication in *Beighton* that the chassis could maintain the desired shape if a portion of one of the cross-members was removed.

With regard to the third point, the Examiner states that *Derman* discloses “room modules.” May 5, 2006 Office Action at 3. *Derman* discloses a wardrobe or cabinet. *Derman* does not disclose any type of “room module.”

Accordingly, as the cited references cannot be combined as suggested by the Examiner, and the individual references fail to disclose the elements recite in Claims 5 and 6, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Claims 7-13, 16 and 19; Rejected under 35 U.S.C. § 103(a)

Claims 7-13, 16 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beighton* '515 in view *Prigmore et al.* (U.S. Patent No. 4,779,514). The deficiencies of *Beighton* are noted above. *Prigmore* discloses a building constructed of pre-made panels that are coupled together by hinges. There are at least two problems with the use of *Derman* as prior art: (1) there is no teaching, incentive or motivation found within these references to combine the references; and (2) the *Prigmore* reference fails to disclose the elements cited by the Examiner.

First, given that each panel of the *Prigmore* reference must be coupled to the foundation, such a structure could not be combined with the cantilevered chassis of *Beighton*. Moreover, as stated above, “obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, *absent some teaching, suggestion, or incentive supporting combination*” *In re Geiger* 815 F.2d 686, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987), (*emphasis added*). Again, neither of the references cited by the Examiner suggests the combination relied upon by the Examiner and, as such, these references may not be combined to form the basis of a rejection under 35 U.S.C. §103(a).

Second, the Examiner states that the *Prigmore* reference discloses both “passive space” and “fixed space.” Applicant disagrees. These phrases are defined phrases in the present application. *See generally*, page 8, lines 19-31. That is, the specification states:

Fixed space is rigid and does not include foldable panels 18. Fixed space is typically any space that has functionality beyond providing volume. For example, the following would qualify as fixed space: closets, bathrooms, kitchens, storages, laundry rooms or house mechanical space, as well as corridors and stairs.
Conversely, passive space is compressible space, *i.e.*, that which may be folded. Typically, the passive space is not laden with fixtures, etc.

Id.

The “fixed space” of the *Prigmore* reference identified by the Examiner is an empty roof area. That is, the *Prigmore* reference does not disclose a “functionality beyond providing volume.” Thus, although not shown as being collapsible in the

Prigmore reference, such a space is still a “space … which may be folded.” Any generally empty space, such as a hollow roof, could be folded, the mere fact that the *Prigmore* reference fails to disclose such a collapsible structure does not change that nature of the space. Additionally, the present application states that the “core modules” have both fixed and passive space. A “core module” is an “indoor room” (page 8, line 13) and not an “outdoor structure” (page 8, line 17-18). A roof such as the *Prigmore* reference roof is not an “indoor room” and is an “outdoor structure.”

Claim 7, which depends from Claim 1, recites a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings and foldable panels. As these references cannot be combined and no individual reference discloses a prefabricated house comprising two or more modules, each module having a frame, the module frames having one or more multiframe openings and foldable panels, the rejection under 35 U.S.C. § 103(a) as to Claim 7 should be withdrawn.

Claim 8, which depends from Claim 7, further recites that a core module has both fixed and passive space. As these references cannot be combined and no individual reference discloses a core module having both fixed and passive space, the rejection under 35 U.S.C. § 103(a) as to Claim 8 should be withdrawn.

Claims 9 and 10 each depend from Claim 8 and rely on their dependency for patentability.

Claim 11, which depends from Claim 10, further recites that the multiframe openings are structured to be converted into openings. As these references cannot be combined and no individual reference discloses that the multiframe openings are structured to be converted into openings, the rejection under 35 U.S.C. § 103(a) as to Claim 11 should be withdrawn.

Claim 12, which depends from Claim 11, recites that the multiframe openings include a pair of studs and a plurality of cross-members. As these references cannot be combined and no individual reference discloses that the multiframe openings include a

pair of studs and a plurality of cross-members, the rejection under 35 U.S.C. § 103(a) as to Claim 12 should be withdrawn.

Claim 13 depends from Claim 12 and relies upon its dependency for patentability.

Claim 16 depends from Claim 10 and relies upon its dependency for patentability.

Claim 19, which depends from Claim 1, further recites that a core module has both fixed and passive space. As these references cannot be combined and no individual reference discloses a core module having both fixed and passive space, the rejection under 35 U.S.C. § 103(a) as to Claim 19 should be withdrawn.

CONCLUSION

In view of the remarks above, Applicant respectfully submits that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,



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